Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 267 (2003) 408–411
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Author index to volume 267

Adeyeye, A.O., see Husain, M.K. 191
Ambashta, R.D., P.K. Wattal, S. Singh and D. Bahadur, Nano-aggregates of hexacyanoferrate (II)-loaded magnetite for removal of cesium from radioactive wastes 335
Andersson, G., A.M. Blixt, V. Stanciu, B. Skubic, E. Holmström and P. Nordblad, Influence of interface mixing on the magnetic properties of BCC $Fe_{0.82}Ni_{0.18}$/V (0 0 1) superlattices 234
Andrzejewski, B., see Toliński, T. 402

Bahadur, D., see Ambashta, R.D. 335
Barnaś, J., see Wilczyński, M. 391
Baszyński, J., see Toliński, T. 402
Becerra, C.C. and A. Paduan-Filho, Magnetic phase diagram of the nearly 2D Heisenberg ferromagnet $(CH_3NH_3)_2CuCl_4$ in a transverse magnetic field 244
Bertram, N., see Forster, H. 69
Bhaumik, A., see Giri, S. 7
Billoni, O.V., see Rodríguez Torres, C.E. 92
Biswas, A., see Smolyaninova, V.N. 300
Blixt, A.M., see Andersson, G. 234
Boháková, F. and I. Šimáek, SQUID magnetopneumography used to estimate the ferromagnetic particle content in the human lungs 357
Bud'ko, S.L., see Ribeiro, R.A. 216

Cabrera, A.F., see Rodríguez Torres, C.E. 92
Canfield, P.C., see Ribeiro, R.A. 216
Cefalas, A.C., see Sarantopoulou, E. 182
Chadjivasiliou, S.C., see Efthimiadis, K.G. 19
Chae, K.P., see Lee, J.-G. 161
Chen, Y.-J., X.-Y. Zhang and Z.-Y. Li, Role of grain boundaries on magnetoresistance of CrO_2–TiO_2 composites: impedance spectroscopy study 152
Cheong, S.-W., see Smolyaninova, V.N. 300
Chernenko, V.A., see Müllner, P. 325

Daniil, M., H. Okumura, G.C. Hadjipanayis and D.J. Sellmyer, Effect of carbon substitution on the magnetic properties of Nd–Fe–(B,C) nanocomposite magnets 316
Dennis, K.W., see Tang, Y.L. 307
Dittrich, R., see Forster, H. 69
Draić, G., see Sarantopoulou, E. 182

Efthimiadis, K.G., S. Makridis, S.C. Chadjivasiliou, E.K. Polychroniadis, A.K. Sianou and G. Litsardakis, On the microstructure and the recrystallization procedure of melt-spun $Nd_{7.5}Fe_{84.8}Ti_{7.7-x}Nb_x$ alloys 19
El Kony, D. and S.A. Saafan, Study of the temperature dependence of both permeability and selectivity of Mg Zn hexaferrites 46
El Marrakechi, O., see Sayouri, S. 1

Fabietti, L.M., see Rodríguez Torres, C.E. 92
Fisher, A.J., see Hofer, W.A. 139
Forster, H., N. Bertram, X. Wang, R. Dittrich and T. Schrefl, Energy barrier and effective thermal reversal volume in columnar grains 69
Fu, D., see Wang, X. 80

Gabay, A.M., see Shcherbakova, Ye.V. 26
Gao, C., see Zhang, L. 111
Gaviko, V.S., see Shcherbakova, Ye.V. 26
Geibel, C., see Süllow, S. 115
Gignoux, D., D. Schmitt and T. Shigeoka, Magnetostriction in the mixed magnetic compound $TbRu_2Ge_2$ 256
Giri, S., A. Bhaumik and H. Nakamura, The effect of cobalt and copper substitution in Mn_{12}-ac 7
Glazkov, V.P., see Kozlenko, D.P. 120
Goode, D.A. and G. Rowlands, The demagnetizing energies of a uniformly magnetized cylinder with an elliptic cross-section 373
Greene, R.L., see Smolyaninova, V.N. 300
Gschneidner Jr., K.A., see Pecharsky, A.O. 60
Gschneidner Jr., K.A., see Zhang, W. 197

Hadjipanayis, G.C., see Daniil, M. 316
Han, B.-s., see Zhang, H.-w. 224
Hill, C., see Smolyaninova, V.N. 300
Hofer, W.A. and A.J. Fisher, Simulation of spin-resolved scanning tunneling microscopy: influence of the magnetization of surface and tip 139
Holmström, E., see Andersson, G. 234
Hono, K., see Takahashi, Y.K. 248
Huang, C.-C., see Tsai, M.-C. 173
Huang, Z.-Y., see Tsai, M.-C. 173
Huda, A.-u. and A. Mookerjee, Magnetism on a rough surface 97

0304-8853/03/$ - see front matter
PII: S0304-8853(03)00831-X

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 267 (2003) 408–411
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Author index to volume 267

Adeyeye, A.O., see Husain, M.K. 191
Ambashta, R.D., P.K. Wattal, S. Singh and D. Bahadur, Nano-aggregates of hexacyanoferrate (II)-loaded magnetite for removal of cesium from radioactive wastes 335
Andersson, G., A.M. Blixt, V. Stanciu, B. Skubic, E. Holmström and P. Nordblad, Influence of interface mixing on the magnetic properties of BCC $Fe_{0.82}Ni_{0.18}$/V (0 0 1) superlattices 234
Andrzejewski, B., see Toliński, T. 402

Bahadur, D., see Ambashta, R.D. 335
Barnaś, J., see Wilczyński, M. 391
Baszyński, J., see Toliński, T. 402
Becerra, C.C. and A. Paduan-Filho, Magnetic phase diagram of the nearly 2D Heisenberg ferromagnet $(CH_3NH_3)_2CuCl_4$ in a transverse magnetic field 244
Bertram, N., see Forster, H. 69
Bhaumik, A., see Giri, S. 7
Billoni, O.V., see Rodríguez Torres, C.E. 92
Biswas, A., see Smolyaninova, V.N. 300
Blixt, A.M., see Andersson, G. 234
Boháková, F. and I. Šimáek, SQUID magnetopneumography used to estimate the ferromagnetic particle content in the human lungs 357
Bud'ko, S.L., see Ribeiro, R.A. 216

Cabrera, A.F., see Rodríguez Torres, C.E. 92
Canfield, P.C., see Ribeiro, R.A. 216
Cefalas, A.C., see Sarantopoulou, E. 182
Chadjivasiliou, S.C., see Efthimiadis, K.G. 19
Chae, K.P., see Lee, J.-G. 161
Chen, Y.-J., X.-Y. Zhang and Z.-Y. Li, Role of grain boundaries on magnetoresistance of CrO_2–TiO_2 composites: impedance spectroscopy study 152
Cheong, S.-W., see Smolyaninova, V.N. 300
Chernenko, V.A., see Müllner, P. 325

Daniil, M., H. Okumura, G.C. Hadjipanayis and D.J. Sellmyer, Effect of carbon substitution on the magnetic properties of Nd–Fe–(B,C) nanocomposite magnets 316
Dennis, K.W., see Tang, Y.L. 307
Dittrich, R., see Forster, H. 69
Draić, G., see Sarantopoulou, E. 182

Efthimiadis, K.G., S. Makridis, S.C. Chadjivasiliou, E.K. Polychroniadis, A.K. Sianou and G. Litsardakis, On the microstructure and the recrystallization procedure of melt-spun $Nd_{7.5}Fe_{84.8}Ti_{7.7-x}Nb_x$ alloys 19
El Kony, D. and S.A. Saafan, Study of the temperature dependence of both permeability and selectivity of Mg Zn hexaferrites 46
El Marrakechi, O., see Sayouri, S. 1

Fabietti, L.M., see Rodríguez Torres, C.E. 92
Fisher, A.J., see Hofer, W.A. 139
Forster, H., N. Bertram, X. Wang, R. Dittrich and T. Schrefl, Energy barrier and effective thermal reversal volume in columnar grains 69
Fu, D., see Wang, X. 80

Gabay, A.M., see Shcherbakova, Ye.V. 26
Gao, C., see Zhang, L. 111
Gaviko, V.S., see Shcherbakova, Ye.V. 26
Geibel, C., see Süllow, S. 115
Gignoux, D., D. Schmitt and T. Shigeoka, Magnetostriction in the mixed magnetic compound $TbRu_2Ge_2$ 256
Giri, S., A. Bhaumik and H. Nakamura, The effect of cobalt and copper substitution in Mn_{12}-ac 7
Glazkov, V.P., see Kozlenko, D.P. 120
Goode, D.A. and G. Rowlands, The demagnetizing energies of a uniformly magnetized cylinder with an elliptic cross-section 373
Greene, R.L., see Smolyaninova, V.N. 300
Gschneidner Jr., K.A., see Pecharsky, A.O. 60
Gschneidner Jr., K.A., see Zhang, W. 197

Hadjipanayis, G.C., see Daniil, M. 316
Han, B.-s., see Zhang, H.-w. 224
Hill, C., see Smolyaninova, V.N. 300
Hofer, W.A. and A.J. Fisher, Simulation of spin-resolved scanning tunneling microscopy: influence of the magnetization of surface and tip 139
Holmström, E., see Andersson, G. 234
Hono, K., see Takahashi, Y.K. 248
Huang, C.-C., see Tsai, M.-C. 173
Huang, Z.-Y., see Tsai, M.-C. 173
Huda, A.-u. and A. Mookerjee, Magnetism on a rough surface 97

0304-8853/03/$ - see front matter
PII: S0304-8853(03)00831-X

Husain, M.K., A.O. Adeyeye, C.C. Wang, V. Ng and T.S. Low, Exchange bias effects in ferromagnetic wires 191

Ishida, I. and S. Morita, Enhanced magnetic moments in Co/Mn multilayers: structural and magnetic investigations 204
Ivanova, G.V., see Shcherbakova, Ye.V. 26

Jarlborg, T., Electronic structure and magnetism in $X_xW_{1-x}O_3$ (X = Nb,V,Re) from supercell calculations 261
Jirák, Z., see Kozlenko, D.P. 120
Johnson, D.T., see Piao, M. 366

Kaal, A., see Sayouri, S. 1
Kamiguchi, Y., see Yuasa, H. 53
Kim, B.-G., see Smolyaninova, V.N. 300
Kim, S.-K., J.-W. Lee, S.-C. Shin, H.W. Song, C.H. Lee and K. No, Voltage control of a magnetization easy axis in piezoelectric/ferromagnetic hybrid films 127
Kim, Y.H., see Kim, Y.S. 105
Kim, Y.S. and Y.H. Kim, Application of ferro-cobalt magnetic fluid for oil sealing 105
Kobe, S., see Sarantopoulou, E. 182
Kollia, Z., see Sarantopoulou, E. 182
Kostorz, G., see Müllner, P. 325
Kowalczyk, A., see Toliński, T. 402
Kozlenko, D.P., V.P. Glazkov, Z. Jirák and B.N. Savenko, Structural study of $Pr_{0.8}Na_{0.2}MnO_3$ at high pressure 120
Kramer, M.J., see Tang, Y.L. 307
Ku, W.J., see Liu, H.R. 386
Kuźmiński, M. and H.K. Lachowicz, Evolution of transverse permeability with DC-field in Co-based metallic glass ribbons 35

Lachowicz, H.K., see Kuźmiński, M. 35
Lane, A.M., see Piao, M. 366
Lassri, H., see Sayouri, S. 1
Laughlin, D.E., see Okumura, H. 347
Lee, C.H., see Kim, S.-K. 127
Lee, J.-G., K.P. Chae and J.C. Sur, Surface morphology and magnetic properties of $CoFe_2O_4$ thin films grown by a RF magnetron sputtering method 161
Lee, J.-W., see Kim, S.-K. 127
Lee, R.N., see Martyanov, O.N. 13
Lee, S.J., see Zhang, W. 197
Lewis, L.H., see Tang, Y.L. 307
Li, C.X., see Liu, H.R. 386
Li, L.-f., see Liu, X. 133
Li, Z.-Y., see Chen, Y.-J. 152
Liang, Y.-Q., G.-Z. Wei, Q. Zhang and Z.-H. Xin, A theoretical study of the spin-$\frac{3}{2}$ Ising model in a random field with crystal field 275
Litsardakis, G., see Efthimiadis, K.G. 19

Liu, H.R., B.J. Qu, T.L. Ren, L.T. Liu, H.L. Xie, C.X. Li and W.J. Ku, High-sensitivity GMR with low coercivity in top-IrMn spin-valves 386
Liu, L.T., see Liu, H.R. 386
Liu, X., C. Ren, L. Ritchie, B.D. Schrag, G. Xiao and L.-f. Li, Magnetic tunneling junctions with permalloy electrodes: a study of barrier, thermal annealing, and interlayer coupling 133
Low, T.S., see Husain, M.K. 191

Ma, Y.G., Z. Yang, M. Matsumoto, A. Morisako and S. Takei, Structural and magnetic properties of NdFeB thin films sputtered on W underlayers 341
Makridis, S., see Efthimiadis, K.G. 19
Martyanov, O.N., R.N. Lee and V.F. Yudanov, Manifestation of granular structure in FMR spectra 13
Matsumoto, M., see Ma, Y.G. 341
McCallum, R.W., see Tang, Y.L. 307
McGuiness, P.J., see Sarantopoulou, E. 182
McHenry, M.E., see Okumura, H. 347
Men'shikov, V.V., S.G. Ovchinnikov, V.V. Rudenko, A.N. Sudakov, V.I. Tugarinov and A.M. Vorotynov, Magnetic anisotropy of the rhombohedral antiferromagntic crystals with *S*-ions. A quantitative estimation 289
Mookerjee, A., see Huda, A.-u. 97
Morisako, A., see Ma, Y.G. 341
Morita, S., see Ishida, I. 204
Müllner, P., V.A. Chernenko and G. Kostorz, A microscopic approach to the magnetic-field-induced deformation of martensite (magnetoplasticity) 325

Nakamura, H., see Giri, S. 7
Ng, V., see Husain, M.K. 191
No, K., see Kim, S.-K. 127
Nordblad, P., see Andersson, G. 234

Okumura, H., D.E. Laughlin and M.E. McHenry, Magnetic and structural properties and crystallization behavior of Si-rich FINEMET materials 347
Okumura, H., see Daniil, M. 316
Ovchinnikov, S.G., see Men'shikov, V.V. 289

Paduan-Filho, A., see Becerra, C.C. 244
Park, C.-S., Crossover between pure quantum and thermally assisted tunneling in a molecular magnet with tetragonal symmetry 281
Park, J.M., see Zhang, W. 197
Pecharsky, A.O., K.A. Gschneidner Jr. and V.K. Pecharsky, The giant magnetocaloric effect between 190 and 300 K in the $Gd_5Si_xGe_{4-x}$ alloys for $1.4 \leqslant x \leqslant 2.2$ 60
Pecharsky, A.O., see Zhang, W. 197
Pecharsky, V.K., see Pecharsky, A.O. 60
Piao, M., A.M. Lane and D.T. Johnson, Rheological and magnetic properties of a metal particle dispersion exposed to magnetic fields 366

Podmiljšak, B., see Sarantopoulou, E. 182
Polychroniadis, E.K., see Efthimiadis, K.G. 19
Poplavskyy, D., Comment on "Extraordinary magnetoresistance of a semiconductor–metal composite van der Pauw disk" 406

Qu, B.J., see Liu, H.R. 386

Ren, C., see Liu, X. 133
Ren, T.L., see Liu, H.R. 386
Ribeiro, R.A., S.L. Bud'ko and P.C. Canfield, Detailed study of the magnetic phase transitions in single crystalline $HoNi_2B_2C$ and $DyNi_2B_2C$ 216
Ritchie, L., see Liu, X. 133
Rodríguez Torres, C.E., A.F. Cabrera, F.H. Sánchez, O.V. Billoni, S.E. Urreta and L.M. Fabietti, Mössbauer identification of μ-type metastable phase as the main magnetic component in $Nd_{60}Fe_{30}Al_{10}$ melt spun alloys 92
Rong, C.-b., see Zhang, H.-w. 224
Rowlands, G., see Goode, D.A. 373
Rudenko, V.V., see Men'shikov, V.V. 289

Saafan, S.A., see El Kony, D. 46
Sahashi, M., see Yuasa, H. 53
Sánchez, F.H., see Rodríguez Torres, C.E. 92
Sarantopoulou, E., S. Kobe, Z. Kollia, B. Podmiljšak, P.J. McGuiness, G. Draić and A.C. Cefalas, Magnetic and optical properties of single $4f^n$ and mixed $4f^{n-1}5d$ electronic configurations of trivalent rare earth ions in wide band gap dielectric crystals 182
Savenko, B.N., see Kozlenko, D.P. 120
Sayouri, S., O. El Marrakechi, M. Tlemani, A. Kaal and H. Lassri, Magnetic and anisotropy studies in amorphous $Fe_{82-x}Ho_xB_{18}$ alloys 1
Schmitt, D., see Gignoux, D. 256
Schrag, B.D., see Liu, X. 133
Schrefl, T., see Forster, H. 69
Sellmyer, D.J., see Daniil, M. 316
Semitelou, I.P., A two-phase magnetic structure of $DySi_2$ 42
Shcherbakova, Ye.V., G.V. Ivanova, V.S. Gaviko and A.M. Gabay, Crystal structure of novel ferromagnetic $LaFe_{13-x}Ga_xC$ compounds 26
Shen, B.-g., see Zhang, H.-w. 224
Shigeoka, T., see Gignoux, D. 256
Shima, T., see Takahashi, Y.K. 248
Shin, S.-C., see Kim, S.-K. 127
Sianou, A.K., see Efthimiadis, K.G. 19
Šimáek, I., see Boháková, F. 357
Singh, S., see Ambashta, R.D. 335
Skubic, B., see Andersson, G. 234
Smolyaninova, V.N., A. Biswas, C. Hill, B.-G. Kim, S.-W. Cheong and R.L. Greene, Charge order to two-dimensional metal crossover in $Pr_{0.5} \times (Sr_{1-y}Ca_y)_{0.5}MnO_3$ 300
Song, H.W., see Kim, S.-K. 127
Stanciu, V., see Andersson, G. 234
Sudakov, A.N., see Men'shikov, V.V. 289
Süllow, S. and C. Geibel, The magnetic and structural phase diagram of the Heusler-series $(Co_{1-x}Ni_x)_2NbSn$ 115
Sur, J.C., see Lee, J.-G. 161
Świrkowicz, R., see Wilczyński, M. 391

Takahashi, Y.K., K. Hono, T. Shima and K. Takanashi, Microstructure and magnetic properties of FePt thin films epitaxially grown on MgO (001) substrates 248
Takanashi, K., see Takahashi, Y.K. 248
Takei, S., see Ma, Y.G. 341
Tang, Y.L., M.J. Kramer, K.W. Dennis, R.W. McCallum and L.H. Lewis, On the control of microstructure in rapidly solidified Nd–Fe–B alloys through melt treatment 307
Tian, X., see Zhao, L. 86
Tlemani, M., see Sayouri, S. 1
Toliński, T., B. Andrzejewski, A. Kowalczyk, Z. Trybuła and J. Baszyński, Low-temperature magnetic transitions in $TmNi_4B$ compound 402
Trybuła, Z., see Toliński, T. 402
Tsai, M.-C., C.-C. Huang and Z.-Y. Huang, A new two-phase homopolar switched reluctance motor for electric vehicle applications 173
Tugarinov, V.I., see Men'shikov, V.V. 289

Urreta, S.E., see Rodríguez Torres, C.E. 92

Vasilyeva, E. and V. Vystavkina, Microstructure and properties of Nd–Fe–B powders by gas atomization 267
Vorotynov, A.M., see Men'shikov, V.V. 289
Vystavkina, V., see Vasilyeva, E. 267

Wang, C.C., see Husain, M.K. 191
Wang, C.C., see Zheng, X. 168
Wang, W.Z., see Zhao, L. 86
Wang, X., Y. Yang and D. Fu, Study of cogging torque in surface-mounted permanent magnet motors with energy method 80
Wang, X., see Forster, H. 69
Wattal, P.K., see Ambashta, R.D. 335
Wei, G.-Z., see Liang, Y.-Q. 275
Wilczyński, M., J. Barnaś and R. Świrkowicz, Electron tunnelling in planar double junctions with ferromagnetic barriers 391

Xiao, G., see Liu, X. 133
Xie, H.L., see Liu, H.R. 386
Xin, Z.-H., see Liang, Y.-Q. 275
Xue, D., see Zhang, L. 111

Yang, Y., see Wang, X. 80
Yang, Z., see Ma, Y.G. 341
Yao, K.L., see Zhao, L. 86

Yuasa, H., Y. Kamiguchi and M. Sahashi, Dual spin valves with nano-oxide layers 53
Yudanov, V.F., see Martyanov, O.N. 13

Zhang, H.-w., T.-y. Zhao, C.-b. Rong, S.-y. Zhang, B.-s. Han and B.-g. Shen, Hard magnetic properties in isotropic nanocomposite $Pr_2Fe_{14}B/\alpha$-Fe ribbons 224
Zhang, L., D. Xue and C. Gao, Anomalous magnetic properties of antiferromagnetic CoO nanoparticles 111
Zhang, Q., see Liang, Y.-Q. 275
Zhang, S.-y., see Zhang, H.-w. 224
Zhang, W., J.M. Park, S.J. Lee, A.O. Pecharsky and K.A. Gschneidner Jr., Optical and magneto-optical properties of $Tb(Mn_{1-x}Fe_x)_2$ compounds where $x = 0.35, 0.5, 0.65$ 197
Zhang, X.-Y., see Chen, Y.-J. 152
Zhao, L., K.L. Yao, W.Z. Wang and X. Tian, Charge density and spin density in interchain coupled organic polymer ferromagnet with non-nearest neighbour hopping interactions 86
Zhao, T.-y., see Zhang, H.-w. 224
Zheng, X., C.C. Wang and J. Zhu, Effect of columnar structure on magnetoresistivity properties of $La_{0.8}MnO_3$ thin films 168
Zhu, J., see Zheng, X. 168

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Magnetism and Magnetic Materials 267 (2003) 412–413
Journal of magnetism and magnetic materials
www.elsevier.com/locate/jmmm

Subject index to volume 267

Adhesion 139
Amorphous alloys 1
Amorphous RE-TM alloys 92
Antiferromagnetic 216
Antiferromagnetism 111

Band structure 115, 261
Biomagnetism 357
Borocarbides 216

Charge density 86
Charge ordering 300
Chemical partitioning model 347
Cobalt ferrite 161
Coercive force 204
Coercivity 248, 267, 386
Cogging torque 80
Columnar growth morphology 168
Co/Mn multilayer 204
Conductivity 139
Controllable spin switching 127
CoPd/PZT hybrid films 127
Crossover 281
Crystal and magnetic structure 120
Crystal field 275
Crystal structure 26, 42

Density functional calculations 139
Dielectric crystals 182
Direct d–d hybridization 204
Doped insulators 261
Double junctions 391
$DySi_2$ 42

Effective volume 69
Electric vehicle 173
Electron spin resonance 289
Electron tunnelling 391
Electronic structure 139
Ellipsometry 197
Energy barrier 69
Energy method 80
Epitaxial film 248
Escape rate 281
Exchange and anisotropy constants 1
Exchange bias 191, 204
Exchange interaction 204

Fe–Ho–B 1
Fe–Nd–Ti–Nb alloys 19
FePt 248
Ferrite films 161
Ferro-cobalt magnetism 105
Ferromagnet 244
Ferromagnetic barriers 391
Ferromagnetic Heusler alloys 115
Ferromagnetic ordering 26
Ferromagnetic particles 357
Ferromagnetic shape-memory alloy 325
FESEM 161
FINEMET ribbon 347
Finite elements 69
First principles simulations 139

Gadolinium–germanium–silicide 60
Gas atomization 267
Giant magnetoimpedance 35
Giant magnetoresistance 53
GMR 386
Grain boundaries 152, 168
Grain size 267
Growth from solid phases 19

Hard magnetic properties 92
Heat capacity 60
Heat treatment 267
Heusler alloy 325
Hexacyanoferrate 335
Hexagonal ferrites 46
High pressure 120
High spin state 204
Homopolar type 173
Hysteresis 111

Impedance 152
Incoherent rotation 341
Incommensurate magnetic structures 256
Inhomogeneity 406
Interchain coupling 86
Interfaces 234
Interlayer coupling 133
Interlayer exchange coupling 234
Intermetallic compounds 19
Inverse magnetostrictive effect 127
Ising model 275

Kerr effect 197

LaFeGaC alloys with $NaZn_{13}$-type structure 26
Laser-induced fluorescence spectroscopy 182

Macroscopic and atomistic magnetization analysis 347
Magnetic and crystallographic phase transition 60
Magnetic anisotropy 26, 289
Magnetic charges 373
Magnetic field 366
Magnetic fluid 105
Magnetic measurements 182
Magnetic ordering temperature 60
Magnetic permeability 46
Magnetic properties 19, 224, 307, 366
Magnetic recording materials 366
Magnetic relaxations 7
Magnetic roughness 97
Magnetic separation 335
Magnetic structure 42
Magnetic surfaces 139
Magnetic tunneling junctions (MTJs) 133
Magnetic wires 191
Magnetically ordered materials 402
Magnetism 234, 261
Magnetite 335
Magnetization 1, 7, 13, 60, 216, 275
Magnetization curves 111
Magnetocaloric effect 60
Magneto-mechanical coupling 325
Magneto-optical properties 197
Magnetopneumography 357
Magnetoresistance 133, 152, 191, 406
Magnetoresistivity 168
Magnetostatic energy 373

0304-8853/03/$ - see front matter
PII: S0304-8853(03)00832-1

Magnetostriction 256
Magnetotransport 53
Manganites 120, 300
Martensitic transition 115
Melt-spinning 307, 316
Metal particle dispersion 366
Metallic glass 35
Metamagnetism 256
Micromagnetics 69, 373
Microstructure 248, 267
MOKE 197
Molecular magnet 7, 281
Mössbauer spectroscopy 92

Nanocomposite $Pr_2Fe_{14}B/\alpha$-Fe ribbons 224
Nanocomposite magnets 316
Nanocrystalline magnetic materials 13
Nanocrystallization 347
Nano-oxide layer 53
Nanoparticles 105, 111, 335
Nd–Fe–B 307
NdFeC magnets 316
Neutron diffraction 42, 120
Ni–Mn–Ga 325

Oil sealing 105
Optical properties 182, 197
Organic polymer ferromagnet 86
Orientation 341

Pair interaction 289
Particle coating 105
Perpendicular magnetic recording 341
Phase diagram 275
Phase separation 300
Phase transitions 216, 244
Piezoelectricity 127
Pseudomorphic growth 341

Quality factor 46
Quasi-crystalline magnetic materials 19

Random field 275
Rare earth 42
Rare earth intermetallic compounds 26
Rare earth intermetallics 256
Rare earth ions 182
Rare-earth–nickel intermetallics 402
Reversal modes 69
Ribbons 316
Rough surfaces 97

Scanning tunneling microscopy 139
Sequential and coherent limit 391
Silicon 42
Skin-effect 35
Spin density 86
Spin tunneling 281
Spin-valve 53, 386
SQUID 357
Sub-layer structure 204
Superconductivity 216
Superlattices 234
Surface morphology 161
Surface-mounted permanent magnet motors 80
Switched reluctance motor 173

Terbium–manganese–iron Laves phases 197
Thermal annealing 133
Thermal history of melt 307
Transverse permeability 35
Tunnel magnetoresistance 391
Twinning 325

Underlayer 341
Uniform magnetization 373

Voltage-driven switching 127

Wheel motor 173